F 50048

Environmental Restoration **ERC** Team Interoffice Memorandum

Job No. 22192 Written Response Required? NO Closes CCN: N/A OU: 200-UP MAR 1997 RECEIVED Data Log In

TO:

M. A. Buckmaster, H0-19

COPIES:

See Below

DATE:

February 24, 1997

FROM: R. T. Coffman

Onsite Measurement Services

H9-11/372-9373

200-UP-1 IRM IMPLEMENTATION SAMPLING, MONTHLY GROUNDWATER SUBJECT: **RESULTS, JANUARY 1997, REV 0**

REFERENCES:

1. BHI, 1996, On-Site Measurements Quality Assurance Plan, BHI-00852, REV 0, Bechtel Hanford, Inc., Richland, Washington.

- 2. BHI, 1995, Field Screening Procedures, BHI-EE-05, Bechtel Hanford, Inc., Richland, Washington.
- 3. BHI, 1996, 200-UP-1 Field Screening Support Logbook, EL-1334, Bechtel Hanford, Inc., Richland, Washington.

This data package contains field screening results for groundwater samples analyzed to support the 200-UP-1 IRM Implementation Sampling program. The Quality Assurance level for this work corresponds to QA-1 as specified in the reference 1 (BHI 1996). The samples were managed under SAF C97-013. As of January 1, 1997, groundwater sampling responsibilities and oversight was transferred from the ERC, to PNNL, with Rust Federal Services performing the sample collection.

Attachment 1 contains Volatile Organic Compound (VOC), total uranium, and technetium-99 results for groundwater samples collected to support the referenced project. The VOC results were generated using a Hewlett Packard 5890 gas chromatograph with a headspace autosampler operated in accordance with Field Screening Procedure (FSP) 1.1, Aqueous Headspace Analysis of Volatile Organic Compounds in Water (BHI 1995). Information concerning operation and calibration of the gas chromatograph is contained in the instrument logbook EL-1329.

The total uranium results were generated using a ChemChek KPA-11a Kinetic Phosphorescence Analyzer operated in accordance with FSP 1.22, Kinetic Phosphorescence Analysis of Total Uranium in Water (BHI 1996). Information concerning operation and calibration of the ChemChek KPA-11a is contained in 200-UP-1 field logbook EL-1335.

C. D. Wittreich, H9-12 Page 2

The technetium-99 analyses were conducted at the 222-S Laboratory. The results are included in this data package for information only. Questions concerning the analyses and results should be directed to the laboratory.

Please contact me if you have any questions on this information.

R. T. Coffman, Analyst

RTC:rtc

Attachments:

Attachment 1. 200-UP-1 IRM Implementation Sampling, Monthly Groundwater Results, January 1997

Attachment 2. Sample Chain of Custody Sheets

Copies:

C. W. Denslow, H9-02, w/attachment 1 only

B. H. Ford, H0-02, w/attachment 1 only

F. W. Gustafson, H9-11, w/attachment 1 only

A. M. Hopkins, H9-11, w/attachment 1 only

I. D. Jacques, H9-10, w/attachment 1 only

R. B. Kerkow, H9-10, w/attachment 1 only

S. A. Strope, T7-12, w/attachment 1 only

L. C. Swanson, H9-11, w/attachment 1 only

BHI Document Control, H4-79, w/original attachments



200-UP-1 IRM Implementation Sampling Monthly Groundwater Results, January, 1997 SAF C97-013

Sample	HEIS	Sample	Analysis	Chioroform	Carbon Tetracloride	TCE	Uranium	Technetium-99
Location	Number	Date	Date (VOA)	(μg/L)	(µg/L)	(µg/L)	(µg/L)	(pCi/L)
299-W19-20	BOJRB3	1/23/97	NA	NA	NA	NA	NA	7510
299-W19-20	BOJR89	1/23/97	1/30/97	5.9	240	8.1	1660	NA
299-W19-24	BOJRB5	1/29/97	NA	NA	NA NA	NA	NA	7300
299-W19-24	BOJR91	1/29/97	1/31/97	2.6	100	2	2640	NA
299-W19-26	BOJRB6	1/27/97	NA	NA	NA	NA	NA	20500
299-W19-26	BOJR92	1/27/97	1/31/97	6.3	200	2.3	740	NA
299-W19-28	BOJRB7	1/23/97	NA	NA	NA	NA	NA	2310
299-W19-28	BOJR93	1/23/97	1/30/97	<2.0	3.3	<2.0	250	NA
299-W19-29	BOJRB8	1/23/97	NA	NA	NA	NΑ	NA	<95
299-W19-29	BOJR94	1/23/97	1/30/97	<2.0	<2.0	< 2.0	23	NA
299-W19-30	BOJRB9	1/24/97	NA	NA	NA	NA	NA	2340
299-W19-30	BOJR95	1/24/97	1/30/97	<2.0	18	<2.0	470	NA
299-W19-34A	BOJRCO	1/24/97	NA	NA	NA	NA	NA	900
299-W19-34A	BOJR96	1/24/97	1/30/97	8.4	77	4.3	1.5	NA
299-W19-35	BOJRC1	1/23/97	NA	NA	NA	NA	NA	550
299-W19-35	BOJR97	1/23/97	1/30/97	2.8	190	17	45	NA
299-W19-37	BOJRC2	1/28/97	NA	NA	NA	NA	NA	2560
299-W19-37	BOJR98	1/28/97	1/31/97	<2.0	26	<2.0	1040	NA
299-W19-38	BOJRC3	1/28/97	NA	NA	NA	NA	NA	2540
299-W19-38	BOJR99	1/28/97	1/31/97	6.2	130	<2.0	180	NA
Trip Blank	BOJRB1	1/23/97	1/30/97	<2.0	<2.0	<2.0	NA	NA
Trip Blank	BOJRB2	1/24/97	1/30/97	< 2.0	<2.0	<2.0	NA	NA
Trip Blank	BOJXY2	1/27/97	1/31/97	<2.0	<2.0	<2.0	NA	`NA
Trip Blank	BOJXY7	1/28/97	1/31/97	<2.0	<2.0	<2.0	NA	NA
Trip Blank	B0JXY8	1/29/97	1/31/97	<2.0	<2.0	<2.0	NA	NA

NA - Not Analyzed

j - Value less than practical quantitation limit

VOA Instrument: Hewlett Packard 5890 GC, Serial # 3235A47685 Method: Dual DB-VRX columns, ECD/FID, 1mL headspace injection

Logbook: 200-UP-1 Field Logbook, EL-1334, pgs. 37 to 41

Uranium Instrument: ChemChek KPA-11a, Serial # 9445050065

Method: Kinetic Phosphorescence

Logbook: 200-UP-1 Field Logbook, EL-1334, pgs. 39 to 41

Pacific Northwest Nation	onal	СНА	IN OF CUSTO	DY/SAM	PLE AN	IALYS	IS REQ	UEST	9	El -22-97	€ 197-013-1	15 Page	l of l.
Collector 92 STEFFLEF	R (RFS)		ompany Contact J.H. KESSNER		phone No. 09)372-9538			Project Co Stewart,			Data Turnaro - 72 Hours		>
Project Designation 200-UP-1 Interim Remedial M			ampling Location 200-W	_				SAF No. C. 197-013					
Ice Chest No.	- 263	F	ield Logbook No.	4C - N -	205	#63		Method of	Shipment	Hund	(ari	red	
Shipped To Mobile Laboratory		0	fisite Property No.	/	V A	······································		Bill of Lad	ing/Air Bill i		NH	· · · · · · · · · · · · · · · · · · ·	
POSSIBLE SAMPLE HAZAR	DS/REMARKS		Preservation	HNO3 to pH	HCl to pH <2 Cooled to 4C								
			Type of Container	G/P	Gs*								
		Γ	No. of Container(s)	1	1								
Special Handling and/or Stora	ge		Volume	20ml	40ml								
	SAMPLE A			URANIUM TOTAL	VOA BY FIELD GC Chloronated Hydrocarbon								
Sample No.	Matrix *	Sample Date	Sample Time		1		1		1				
B0JR89	Water	JAN 23 1997	0908										
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CHAIN OF POSSESSION Relinquished By Relinquished By Relinquished By Relinquished By	Date/Time	Sign/Print No.	Date/Ti Coll (-)7-6 Date/Ti	47/ <i>D80</i> 0 ime 37/082 0 ime	FAX copies	TIVITY EXI		72-1704)	El 1-2	22-97	•	S SE SE SO SL W SL SE	Soil Sediment Soild Sediment Soild Shudge Water Oil Air Drum Solids Drum Liquids Tissue Wipe Liquid Vexetation Other
LABORATORY Received B	y			Title							Date/Ti	me	
FINAL SAMPLE Disposal I	Method			·		Disposed!	Ву				Date/T	me	

Pacific Northwest Nation Laboratory	nal	CH	AIN OF CUSTO	DY/SAM	IPLE A	NALYS	SIS REC	QUEST		229	1 97-013-1	7 Page	1 of 1
Collector Rn FOX (RFS	j)		Company Contact J.H. KESSNER	Tele	phone No. 509)372-9538	}		Project Co Stewart,			Data Turnarou ~72 Hours	ind FIE1	LD
Project Designation 200-UP-1 Interim Remedial Mo	onitoring Ground	lwater Sampling- FY1997	Sampling Location 200-W					SAF No. C 197-013					
Ice Chest No.	776		Field Logbook No. EFL - 111	11-6	PAGE	65		Method of	Shipment	GOV.	Vehn	: 4	
Shipped To Mobile Laboratory			Offsite Property No.	1/A				Bill of Lad	ing/Air Bill	No.			
POSSIBLE SAMPLE HAZARI	S/REMARKS	, , , , , , , , , , , , , , , , , , ,	Preservation	HNO3 to pH	HCl to pH <2 Cooled to 4C								
 			Type of Container	G/P	Gs*								
			No. of Container(s)	1	1							· ·	
Special Handling and/or Storag	e		Volume	20ml	40ml								
	SAMPI	LE ANALYSIS		URANIUM TOTAL	VOA BY FIELD GC Chloronated Hydrocarbon								
Sample No.	Matrix *	· Sample Date	Sample Time			1				1			
B0JR91	Water	WAN 29 19	0919	·	<u> </u>								
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CHAIN OF POSSESSION		Sign/Print				CTIVITY EX	ŒMPT		10			s -	Matrix * Soil Sediment
Relinquished By RR FOX (RFS)	Date/Time	97 RTCOFFMA	a) /RT Coffme	ime 1300 1/29/97	FAX copies	r of log-in to l	DL Stewart (3	72-1704)	SV (-2:	2-97		SL =	= Solid = Sludge = Water
Relinquished By	Date/Time	Received By	Date/T	ime								A -	■ Oil ■ Air ■ Drum Solids
Relinquished By	Date/Time	Received By	Date/I	Time								т •	 Drum Liquids Tissue Wipe
Relinquished By	Date/Time	Received By	Date/I	(ime								l L	 Liquid Vegetation Other
LABORATORY Received By SECTION				Title							Date/Tir	ne	
FINAL SAMPLE Disposal Mo	ethod					Disposed	Ву				Date/Tir	ne	

Pacific Northwest Nation Laboratory	nal	CHA	AIN OF CUSTO	DY/SAM	IPLE AN	NALYS	IS REQ	UEST			C97-013-18	Page	1 of 1-
Collector RR FOX (RF			Company Contact J.H. KESSNER	Tele (5	phone No. 09)372-9538		· · · · · · · · · · · · · · · · · · ·	Project Co Stewart,			Data Turnarow Field	ıd	
Project Designation 200-UP-1 Interim Remedial Mo	onitoring Groundwater	Sampling FY1997	Sampling Location 200-W		· · · · · · · · · · · · · · · · · · ·			SAF No. C97-013		· · · · · · · · · · · · · · · · · · ·	<u> </u>		, , , , , , , , , , , , , , , , , , , ,
Ice Chest No. Sin L 27) (Field Logbook No. EFL - // Offsite Property No.	111-6	PRICE	62		Method of	w. U	Ehil	14		
Shipped To Mobile Laboratory			Offsite Property No.	V/H	•			Bill of Lad	ing/Air Bill i	No.			
POSSIBLE SAMPLE HAZARD	S/REMARKS		Preservation	HNO3 to pH	HCl to pH <2 Cooled to 4C					1			
			Type of Container	G/P	Gs*		1						
			No. of Container(s)	1	1								
Special Handling and/or Storage	e		Volume	20ml	40ml								
	SAMPLE AN		URANIUM TOTAL	VOA BY FIELD GC – Chloronated Hydrocarbon					iği "				
Sample No.	Matrix *	Sample Date	Sample Time										
B0JR92	Water	AN 27 199	7 1401	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \									
													<u> </u>
CHAIN OF POSSESSION		Sign/Print I		1.	6	TIVITY EX	EMPT	2.1 704)	£ 1-2:	3-9-1		S - SE -	fatrix * Soil Sediment
Relinquished By Relinquished By Relinquished By Relinquished By Relinquished By	Date/Time 1.21-67 16 Date/Time 1-28-97 693 Date/Time 1-28-91 12 Date/Time	ime 95 1600 ime 16930 ime 1245 -28-97 ime	1	ef log in to E	L Stewart (27	2-1704)	q- 1-23	>-17		SO - SL - W - O - A - DS - DL - T - W - V - V	Solid Shudge Water Oil Air Drum Solids Drum Liquids Tissue Wipe Liquid Vegetation Other		
LABORATORY Received By SECTION				Title							Date/Time		
FINAL SAMPLE Disposal Me	ethod					Disposed 1	Ву		·····		Date/Time	;	

Pacific Northwest Nation	onal	СНА	IN OF CUSTO	DY/SAM	IPLE AN	IALYSI	S REQ	UEST	C	DR -22-97	₹97-013-1	9 Page	1 of 1.
Collector RZ STEFFLER	(RFS)	G	Company Contact J.H. KESSNER		phone No. 09)372-9538			Project Co Stewart,			Data Turnarou 22 Hours	ind FIEL	D
Project Designation 200-UP-1 Interim Remedial M	fonitoring Groundwate		ampling Location 200-W					SAF No. 2 97-013		·····			
Ice Chest No. 5/4/2 - 2	63	F	ield Logbook No.	C-N	205 #	63		Method of	Shipment	Han	d Carr.	ical	
Shipped To Mobile Laboratory		C	Offsite Property No.	IVA				Bill of Lad	ing/Air Bill	No.	NA.		
POSSIBLE SAMPLE HAZAR	DS/REMARKS		Preservation	HNO3 to pH <2	HCl to pH <2 Cooled to 4C								
		_	Type of Container	G/P	Gs*								
			No. of Container(s)	1	1	}							
Special Handling and/or Stora	ge		Volume	20ml	40ml								
	SAMPLE A	ANALYSIS		URANIUM TOTAL	VOA BY FIELD GC - Chloronated Hydrocarbon								
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Sample No.	Matrix *	Sample Date	Sample Time										T
BOJR93	Water	JAN 23 1997	1112	<u> </u>		· ·				 			
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CHAIN OF POSSESSION		Sign/Print N			TOTAL AC	INSTRUCT	MPT	r z-1704)	01.2	2-97		S -	[atrix * Soil Sediment Solid
Relinquished By RZ STEFFLER (RES) Relinquished By	Date/Time	OFOO KECEIVED BY	Tools (-27-	92/0500	2		- ,					SL - W -	Sludge Water Oil Air
Relinquished By	1-27-97/0	820 LT Coffman Received By	/-27-9- Date/Ti	7/0820 ime	1							DS - DL - T -	Drum Solids Drum Liquids Tissue Wipe
Relinquished By	Date/Time	Received By	Date/T	ime	1							L -	Liquid Vegetation Other
LABORATORY Received By SECTION	y		Title	<u> </u>				·		Date/Tin	ne		
FINAL SAMPLE Disposal Management Disposition	Method					Disposed E	Зу				Date/Tin	ne	

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Pacific Northwest Natio Laboratory	nal	CHA	AIN OF CUSTO	DY/SAM	IPLE AN	NALYS	IS REQ	UEST	C	kl 22-97	P97-013-	20 Page	1 of 1
Collector RZ STEFFLER	(RFS)		Company Contact J.H. KESSNER		phone No. 09)372-9538	}	 	Project Co Stewart,			Data Turnaro	und FIEL	Ď
Project Designation 200-UP-1 Interim Remedial M	onitoring Groundwa		Sampling Location 200-W	· · · · · · · · ·	····			SAF No. \$297-013		·····	1		····
Ice Chest No. SML -	263		Field Logbook No.	1C-N-	- 205	7/3	_		Shipment	Hand	Carr	11	
Shipped To Mobile Laboratory			Offsite Property No.	NH		<u> </u>		Bill of Lad	ing/Air Bili		NA		
POSSIBLE SAMPLE HAZARI	DS/REMARKS		Preservation	HNO3 to pH <2	HCl to pH <2 Cooled to 4C	ł							
			Type of Container	G/P	Gs*								
			No. of Container(s)	1	1							İ	
Special Handling and/or Storag	e		Volume	20ml	40ml								
	SAMPLE.	analysis		URANIUM TOTAL	VOA BY FIELD GC — Chloronated Hydrocarbon								
Sample No.	Matrix *	Sample Date	Sample Time				<u> </u>						
B0JR94	Water	JAN 23 199	7 1021										
												_	
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CHAIN OF POSSESSION Relinquished By	Date/Time	Sign/Print		ime	TOTAL AC	INSTRUCT TIVITY EXE	EMPT	2.1704)	200 1	-27-	· G 7	S - SE -	Matrix * Soil Sediment Solid
RZ STEFFLER INFS	-1-27-87/0	Received By NO	etal 1-27	-97/000	1	_					• /	SL -	Sludge Water
Relinguished Whesteel	Date/Time (~2フ-ダイ/	OF 10 Received By	Date/Ti	ime 7/0820						-		A -	Oil Air Drum Solids
Relinquished By	Date/Time	Received By / U	Date/Ti	infe								т -	 Drum Liquids Tissue Wipe
Relinquished By	Date/Time	Received By	Date/Ti	ime	1							L - V -	Liquid Vegetation Other
LABORATORY Received By SECTION				Title	<u> </u>						Date/Ti	me	
FINAL SAMPLE Disposal M DISPOSITION	ethod				- ,	Disposed I	Ву			·····	Date/Ti	me	

Pacific Northwest Nation	nal	CH	AIN OF CUSTO	DY/SAM	IPLE AN	NALYS	SIS REC	UEST	1-2	Sel 22-97	A97-013-	21 Page	l of l.
Collector RZ STEFFLER	(RFS)		Company Contact J.H. KESSNER		phone No. 09)372-9538	-		Project C Stewart	oordinator DL		Data Turnaro		D
Project Designation 200-UP-1 Interim Remedial Mo	onitoring Gro		Sampling Location 200-W	<u></u>				SAF No. 2 197-01:	3		<u> </u>	· <u>·</u>	<u></u>
Ice Chest No.			Field Logbook No.				·		f Shipment			<u> </u>	
Shipped To Mobile Laboratory	·		Offsite Property No.					Bill of La	ling/Air Bill	No.			<u> </u>
POSSIBLE SAMPLE HAZARI	S/REMAR	KS	Preservation	HNO3 to pH	HCl to pH <2 Cooled to 4C	Ī							
			Type of Container	G/P	Gs*								
			No. of Container(s).	ì	1								
Special Handling and/or Storage	e		Volume	20ml	40ml								
	SAN	MPLE ANALYSIS		URANIUM TOTAL	VOA BY FIELD GC Chloronated Hydrocarbon					,			
Sample No.	Matri	x * Sample Date	Sample Time		1	}						1	
B0JR95	Wat	er JAN 24 199	7 0820	X	Х								
				1						 			
													
										 			
				<u> </u>				<u> </u>	<u></u>	<u></u>		<u> </u>	<u> </u>
CHAIN OF POSSESSION	Date/T	Sign/Print		ime	SPECIAL : TOTAL AC	TIVITY EX	KEMPT	72-1704) (60 1-2			S =	fatrix * Soil Sediment Solid
Relinquished By RZ STEFFLER (RFS)	1-27-	97/0800 NJ Celler	end 1-27	-97/00C	<u>,</u>				W 1-2	-2 -4	/	SL -	Sludge Water
Relinquished By	Date/T /-27/ Date/T	97/0820 DT Cellon	Date/T 1-27- Date/T	-97/0820							DS - DL -	Oil Air Drum Solids Drum Liquids Tissue	
Relinquished By	Date/T	ime Received By	Date/T	ime	-							WI -	Wipe Liquid Vegetation Other
LABORATORY Received By SECTION				Title	 -						Date/T	ime	
FINAL SAMPLE Disposal Me	ethod		· · · · · · · · · · · · · · · · · · ·			Disposed	i By			<u></u>	Date/T	ime	

Pacific Northwest National Laboratory	CHAI	N OF CUSTOD	Y/SAM	PLE AN	IALYSI	S REQU	JEST	C 1-2	297	€97-01 3 -2	2 Page	1 of 1
Collector RZ STEFFLER (RFS)		mpany Contact J.H. KESSNER		hone No. 09)372-9538			Project Co Stewart,	ordinator		Data Turnaro	und FIEL	D
Project Designation 200-UP-1 Interim Remedial Monitoring Groundwater Sampling		npling Location 200-W					SAF No. C#97-013					
Ice Chest No. 5ML - 263	Fie	ld Logbook No.	VHC-	N-20	5-#6	3	Method of	Shipment	Huno	l Car	ried	7
Shipped To Mobile Laboratory	on	site Property No.		VA			Bill of Lad	ing/Air Bill I	₹o.	NA		
POSSIBLE SAMPLE HAZARDS/REMARKS		Preservation	HNO3 to pH <2	HCl to pH <2 Cooled to 4C						Ţ		
		Type of Container	G/P	Gs*								
		No. of Container(s)	1	1						1		
Special Handling and/or Storage		Volume	20ml	40ml								
SAMPLE ANALYSIS			URANIUM TOTAL	VOA BY FIELD GC - Chloronated Hydrocarbon								
Sample No. Matrix * Sa	mple Date	Sample Time						1				,
BOJR96 Water JAN	24 1997	1013	X	X								
			′									<u> </u>
												
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LABORATORY Received By SECTION			Title		,					Date/Ti	me	
FINAL SAMPLE Disposal Method DISPOSITION					Disposed E	Ву				Date/Ti	me	

Pacific Northwest Nat Laboratory	tional		CHA	AIN OF CUSTO	DY/SAM	IPLE AN	NALYS	IS REQ	UEST	C 1-2	22-97)F97-013-2	23 Page	1 of 1
Collector RZ STEFFLI	ER (RFS)			Company Contact J.H. KESSNER		phone No. 09)372-9538	}		Project Co Stewart,			Data Turnaro -72 Hours		<u> </u>
Project Designation 200-UP-1 Interim Remedial	Monitoring G	roundwater Sa	ımpling FY1997	Sampling Location 200-W	· · · · · · · ·				SAF No.				1 120	<u> </u>
Ice Chest No. 5/1/2 -	263			Field Logbook No.	1C-N-	205	#63		Method of	Shipment	Hand	Carri	el	
Shipped To Mobile Laboratory		·		Offsite Property No.	11/1	4		-	Bill of Lad	ing/Air Bill I	V.	14	-	
POSSIBLE SAMPLE HAZA	RDS/REMA	RKS		Preservation	HNO3 to pH	HCl to pH <2 Cooled to 4C		T	 		 	'/		7
				Type of Container	G/P	Gs*	 		 			1		+
				No. of Container(s)	1 ,	1								
Special Handling and/or Stor	rage			Volume	20ml	40ml								
	S/	AMPLE ANA	LYSIS		URANIUM TOTAL	VOA BY FIELD GC Chloronated Hydrocarbon								
Sample No.	Mat	nix*	Sample Date	Sample Time										
B0JR97	W	ater	JAN 23 199	7 /227										
	 			 			<u> </u>	-			<u> </u>			
										<u> </u>	 			
CHAIN OF POSSESSION Relinquished By	11/1-		Sign/Print?			TOTAL AC	INSTRUCT	MPT	72-1704) K	L 1-7	7-97		S SE	Matrix * - Soil - Sediment
RZ STEFFLER (BFS)	<i>7</i> /\	Time 7-47/08		Teals 1-27	G7/0800		or log at to D	D OWNAL (S		C. 12	2 1/		SL W	= Solid = Shudge = Water
Reinquistation Collection	Date (727	Time - 97/08/0	Received By	Date/T	10820								O A	~ Oil = Air ~ Drum Solids
Relinquished By	Date	/Time	Received By	Date/T	ime]					•		Ţ,	Drum LiquidsTissueWipe
Relinquished By	Date	/Time	Received By	Date/T	ime							•	L V	= Liquid = Vegetation = Other
LABORATORY Received SECTION	Ву				Title				·			Date/Tir	i	
	l Method						Disposed I	Эу				Date/Tir	ne	

Pacific Northwest N Laboratory				IN OF CUSTO	DY/SAM	IPLE AN	NALYS	IS REQ	UEST	1-2	1297	P 97-013-	24 Page	1 of 1.
Collector RF SICKL	R FOX (RFS) E (RFS)	26 12	g-92	ompany Contact J.H. KESSNER		phone No. 09)372-9538			Project Co Stewart,	ordinator DL		Data Turnaro -72 Hours		 D
Project Designation 200-UP-1 Interim Remedi			i Çi	ampling Location 200-W					SAF No. C 197-013	•				
Ice Chest No.	276		Fi	eld Logbook No. EFL - //	111-6	phe £	67		Method of	Shipment <i>GoV</i>	Vel	icly		
Shipped To Mobile Laboratory			О	ffsite Property No.	MA		·		Bill of Lad	ling/Air Bill :	No. V/A			
POSSIBLE SAMPLE HAZ	ZARDS/REMA	ARKS		Preservation	HNO3 to pH	HCl to pH <2 Cooled to 4C								
				Type of Container	G/P	Gs*								
				No. of Container(s)	1	1							· [
Special Handling and/or S	torage			Volume	20ml	40ml								
		SAMPLE AN	ALYSIS		URANIUM TOTAL	VOA BY FIELD GC Chloronated Hydrocarbon								
Sample No.	Ma	atrix *	Sample Date	Sample Time										
BOJR98	V	/ater	AN 2 8 1997	0837	V	· i/								
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			* ***	•	- -	<u> </u>					1	<u> </u>		-
					<u> </u>							<u></u>	ــــــ	<u></u>
CHAIN OF POSSESSIO	ON		Sign/Print Na			1	Ήνπη έχ	EMPT			3 - 6 -	_	s -	Matrix * Soil Sediment
Relinquished By HH	FOX (HFS)Dat				me /300	-FAX copies	ef log in to l	DL Stewart (37	2 -1704)	de 1-	22-47	,	SO =	Solid Sludge
Relinquished By		8-9.7 e/Time	Received By	RTCOFFINAL 1-		1							0 -	Water Oil
			Description 4 Phys	Date/Ti		4							DS -	Air Drum Solids Drum Liquids
Relinquished By	Dai	te/Time	Received By	Date/11	ine								T - WI ~	Tissue Wipe
Relinquished By	Da	te/Time	Received By	Date/Ti	ime								V -	Liquid Vegetation Other
LABORATORY Received	ABORATORY Received By Title SECTION											Date/Ti	me	
	osal Method						Disposed	Ву				Date/Ti	ime	

Pacific Northwest Nat Laboratory				AIN OF CUSTO	DY/SAM	PLE AN	IALYS	IS REQ	UEST	[-2	DR 297	P97-013-2	5 Page	1 of 1.
Collector RT SICKLE	11'9) (NF9)	PF 1-28		Company Contact J.H. KESSNER		ohone No. 09)372-9538			Project Co Stewart,			Data Turnarou 72 Hours	ind F(EL	·D
Project Designation 200-UP-1 Interim Remedial	Monitoring (Groundwater Sar	npling-FY1997	Sampling Location 200-W					SAF No. 197-013		· · · · · · · · · · · · · · · · · · ·	·• ···································		
Ice Chest No.	276		······································	Field Logbook No.	111-6	YALE	6.	?	Method of	Shipment	Uzh	16/4	,	
Shipped To Mobile Laboratory				Offsite Property No.	W/4			•		ing/Air Bill M	io.			
POSSIBLE SAMPLE HAZA	RDS/REMA	ARKS		Preservation	HNO3 to pH	HCl to pH <2 Cooled to 4C								
				Type of Container	G/P	Gs*								
				No. of Container(s)	. 1	1								
Special Handling and/or Store	ige			Volume	20ml	40ml								
	s	AMPLE ANAL	YSIS		URANIUM TOTAL	VOA BY FIELD GC Chloronated Hydrocarbon								
Sample No.	Ma	atrix * .	Sample Date	Sample Time		1		1						1
B0JR99	W	/ater 🦠	IAN 281	0907										
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					<u>.l.</u>	SPECIAL I	NETDUC	TONG		<u> </u>			-T	fatrix *
CHAIN OF POSSESSION			Sign/Print	Names		TOTAL AC	TIVITY EXE	EMPT	,	١.			s -	Soil
Relinquished By RR FO	((FIF9)Dat	e/Time/300 -28-97	Received By PTC-Um	Date/Ti	ime 1300 1-25-97		of log-in to D	L-Stewart (37	2-1704):	€ Ø 1-2	2-97	7	SO =	Sediment Solid Studge Water
Relinquished By	J Dat	e/Time	Received By	/ Date/Ti	ime				•				A -	Oil Air Drum Solids
Relinquished By	Dat	e/Time	Received By	. Date/Ti	ime								DL -	Drum Liquids Tissue
Relinquished By	Dat	e/Time	Received By	Date/T	ime	-						•	V -	Wipe Liquid Vegetation Other
LABORATORY Received E SECTION	у			· · · · · · · · · · · · · · · · · · ·	Title		·			·		Date/Tin	ne	
FINAL SAMPLE Disposal DISPOSITION	Method						Disposed F	Зу				Date/Tin	ne	

Pacific Northwest Nation	onal	СНА	IN OF CUSTO	DY/SAM	PLE A	NALYS	IS REC	QUEST		10x -2297	₹97-013-	27 Page	1 of 1.
Collector RZ STEFFLE	R (RFS)	C	ompany Contact J.H. KESSNER		ohone No. 09)372-953	8	-	Project Co Stewart,			Data Turnaro	und F(EL	D
Project Designation 200-UP-1 Interim Remedial M	fonitoring Groundwate	r Sampling-FY1997	ampling Location 200-W					SAF No. C ₂ P97-013					
Ice Chest No. 5/1/2 - 2	263	F	ield Logbook No.	C-N-	205	# 63		Method of	Shipment	Hand	L Car	ried	
Shipped To Mobile Laboratory		0	fisite Property No.		VA			Bill of Lad	ing/Air Bill i	No.	NA		
POSSIBLE SAMPLE HAZAR	DS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C									
			Type of Container	Gs*									
·			No. of Container(s)	1									
Special Handling and/or Stora	ge		Volume	40ml									
	SAMPLE A	NALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time		1								
BOJRB1	Water	JAN 23 1997	0800										
			_										
CHAIN OF POSSESSION Relinquished By Relinquished By Relinquished By Relinquished By	Date/Time /-27-97/82 Date/Time Date/Time Date/Time	Received By	Date/Ti	7/0800 ime /0873 ime	TOTAL A	INSTRUC ACTIVITY EX Es of logain to I	EMPT	77.1704)	ER 1-2	22-97		S SE SE SO SL SL SO SL SL SE SE SO SL SL SE	fatrix * Soil Sediment Solid Sludge Water Oil Air Drum Solids Drum Liquids Tissue Wipe Liquid Vegetation Other
LABORATORY Received By SECTION	у			Title							Date/T	ime	
FINAL SAMPLE Disposal Moderation	Method					Disposed	Ву				Date/T	ime	

Pacific Northwest Nation Laboratory	nal	CH	HAIN OF CUSTODY/SAMPLE ANALYSIS REQ						<i>-</i> 1-1	60 2297	£97-013-	28 Page	1 of 1		
Collector RZ STEFFLEF		Company Contact Telephone No. J.H. KESSNER (509)372-9538						Project Coordinator Stewart, DL Data Turnaround 72 Hours							
Project Designation 200-UP-1 Interim Remedial Mo	onitoring Groundwater	Sampling FY 1997	Sampling Location 200-W					SAF No. C/97-013							
Ice Chest No. SML - 20	Field Logbook No. WHC - N-205 #63					Method of Shipment // 4					ingl				
Shipped To Mobile Laboratory	Offsite Property No.						Bill of Lading/Air Bill No.								
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation	HCl to pH <2 Cooled to 4C											
			Type of Container	Gs*											
			No. of Container(s)	1		<u>.</u>						L			
Special Handling and/or Storage			Volume	40mi											
		VOA BY FIELD GC Chloronated Hydrocarbon													
Sample No.	Matrix *	Sample Date	Sample Time					1	1						
B0JRB2	Water	1.24.97	0730	V											
		·													
						,									
			·												
CHAIN OF POSSESSION Relinquished By Date/Time RESTEFFLED (RFS) Date/Time PAZ STEFFLED (RFS) Date/Time Date/Time Restived By Date/Time Restived By Date/Time Received By Date/Time													Matrix * S = Soil SE = Sediment SO = Solids SL = Studge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other		
LABORATORY Received By SECTION				Title							Date/Ti	me			
FINAL SAMPLE Disposal Me	ethod					Disposed	Ву				Date/Ti	me	,		

Pacific Northwest Na Laboratory	tional	СН	AIN OF CUSTO	DY/SAM	PLE A	NALYS	IS REQ	UEST			C97-013-2	29 Page	1 of 1
Collector FUX	Company Contact Telephone No. J.H. KESSNER (509)372-9538					Project Co Stewart,			Data Turnaro Field	Data Turnaround Field			
Project Designation 200-UP-1 Interim Remedial	Sampling Location 200-W					SAF No. C97-013							
Ice Chest No.	Field Logbook No. EFL-1111-C PACE 62						Method of Shipment GOV. Urhilly						
Shipped To Mobile Laboratory			Offsite Property No.	·			Bill of Lading/Air Bill No.						
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation	HCl to pH <2 Cooled to 4C									
			Type of Container	Gs*									
			No. of Container(s)	1						<u> </u>			<u> </u>
Special Handling and/or Storage			Volume	40ml							•		
· .	•	VOA BY FIELD GC Chloronated Hydrocarbon								-			
Sample No.	Matrix *	Sample Date	Sample Time										
B0JXY2	Water	1-27-47	0730	/									
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	¥								 	<u> </u>			
	<u> </u>				ļ	-			<u> </u>				<u> </u>
	1				SPECIAL	INSTRUC	TIONS				<u> </u>	Тм	atrix *
CHAIN OF POSSESSION Sign/Print Names Relinquished By Date/Time Received By Date/Time 1517 Relinquished By Date/Time CAND Received By Date/Time Date/						SU							
LABORATORY Received SECTION	Ву			Title	146				****		Date/Tir	ne	
	al Method					Disposed	Ву				Date/Ti	ne	

		CHA	AIN OF CUSTO	DY/SAM	PLE A	NALYS:	IS RE	QUEST			C97-013-3	O Page	<u>l</u> of <u>l</u> ,	
Collector R. R. Fox	Company Contact J.H. KESSNER	Project Co Stewart,			Data Turnaroi Field	Jnd								
Project Designation 200-UP-1 Interim Remedial Monitoring Groundwater Sampling FY199			Sampling Location 200-W					SAF No. C97-013 Method of Shipment Gen. Vef. Bill of Lading/Air Bill No.						
			Field Logbook No.											
			Offsite Property No.											
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation	HCl to pH <2 Cooled to 4C										
			Type of Container	Gs*										
·				1									<u> </u>	
Special Handling and/or Storage			Volume	40ml			}							
	SAMPLE AN	ALYSIS .		VOA BY FIELD GC Chloronated Hydrocarbon										
Sample No.	Matrix *	Sample Date	Sample Time			t sur hour						#61811S.)		
B0JXY7	Water	1-28-97	0730	X	ļ		_							
		· · · · · · · · · · · · · · · · · · ·								<u> </u>			<u> </u>	
					<u> </u>		+			<u> </u>		<u> </u>	 	
											<u> </u>		<u> </u>	
CHAIN OF POSSESSION		Sign/Print	Names		SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT							s -	fatrix * Soil Sediment	
Relinquished By RR FOX (RFS)	Date/Time 1360	Received By	Date/I	ime <i>1</i> 300 1-28-97								SO = SL = W =	Solid Sludge Water	
Relinquished By	Date/Time	Received By	Dater i	ıme								A -	Oil Air Drum Solids	
Relinquished By	Date/Time	Received By	Date/T	Time								DL "	Drum Liquids Tissue Wipe	
Relinquished By	Date/Time	Received By	Date/T	Time]							L -	Liquid Vegetation Other	
LABORATORY Received By SECTION				Title						<i>-</i>	Date/Tim	ie		
FINAL SAMPLE Disposal Me	ethod					Disposed	Ву				Date/Tim	ie		

		СН	AIN OF CUSTO	DY/SAM	PLE A	NALYSI	S REQ	UEST			C97-013-3	Page	<u>i</u> of <u>i</u>
Collector	Company Contact Telephone No. J.H. KESSNER (509)372-9538						ordinator		Data Turnaround Field				
Project Designation 200-UP-1 Interim Remedial M	R FOX (RFS) onitoring Groundwat	er Sampling FY199	Sampling Location 200-W	.	Stewart, DL Field SAF No. C97-013								
tce Chest No.	-	Field Logbook No. FFL - ///	PALE		Method of Shipment GW. Veh: 6 /4								
Shipped To Mobile Laboratory			Offsite Property No.	Bill of Lading/Air Bi					No.				
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation	HCI to pH <2 Cooled to 4C									
			Type of Container	Gs*									
			No. of Container(s)	1		<u></u>							
Special Handling and/or Storage			Volume	40ml									
	SAMPLE AN	NALYSIS	<u> </u>	VOA BY FIELD GC Chloronated Hydrocarbon							:		
Sample No.	Matrix *	Sample Date	Sample Time	WEST STATES			1			11 12 12 12 12 12 12 12 12 12 12 12 12 1		e le rei	PARK TO
B0JXY8	Water	1-29-97	0730										
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CHAIN OF POSSESSION		Sign/Print	<u>l</u>		INSTRUCT								
Relinquished By RR FOX (RFS) Relinquished By	Date/Time /30	Date/I	ime /300 <i>J 29-97</i> ime	2							SO = SL = W =	Solid Sludge Water Oil	
		Received By										DS -	Air Drum Solids
Relinquished By	Date/Time	Received By	Date/T	iine								Т -	Drum Liquids Tissue Wipe
Relinquished By	Date/Time	Received By	Date/I	ime								V •	 Liquid Vegetation Other
LABORATORY Received By SECTION				Title	.1.	 -			·		Date/Tim	e	
FINAL SAMPLE Disposal Me	ethod		······································			Disposed l	Ву				Date/Tim	e	-